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# ECONOMIC FUNCTIONS OF THE EXCEL PROGRAM AND SOLVING ECONOMIC PROBLEMS ON THEM

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***Abstract:*** The observations made show that, first of all, the capabilities of this Microsoft Excel program are very diverse and rich. There are opportunities for almost every user to use it to solve many life issues. Second, Microsoft Excel's capabilities allow for wider application in research, production, economy, business, commerce and many other fields.

***Keywords*:** Microsoft excels economy, PLT function, PRPLT function, OSPLT function.

Today, the activity of specialists, groups, large production enterprises or educational institutions largely depends on how well they are provided with the necessary information and information, and how effectively they can use this information. remains.

First of all, before coming to a decision, it is necessary to collect, process and analyze a lot of information related to this issue (field). Sometimes the amount of such data increases so much that it becomes impossible to process and analyze them without the help of special technical systems. In addition, since the amount of information that needs to be received and processed in everyday life is increasing, sometimes it takes a lot of time to group them, distribute them in a targeted way, and process them.

This means that computerized systems and other information technologies will enter all spheres of human activity as a tool of intellectual work, allowing for rapid collection of information, processing, modeling of processes, events and phenomena, and their analysis. One of such technologies is undoubtedly the Microsoft Excel program. Observations show that, first of all, the possibilities of this Microsoft Excel program are very colorful and rich. There are opportunities for almost every user to use it to solve many life issues. Second, Microsoft Excel's capabilities allow for wider application in research, production, economy, business, commerce and many other fields.

However, in our opinion, this program is often used only for mathematical calculations, even for accounting issues. The possibility of the Microsoft Excel program aimed at automating the process of solving a number of economic problems, as well as the ability to solve purely economic problems, is left out of consideration.

Therefore, if another study of the capabilities of this program is necessary to consider that Microsoft Excel, which is a part of the Microsoft office suite of modern computers, is enough for users to solve economic issues, in exchange for purchasing new programs. it opens the way to learning and putting into practice their possibilities and saving them from the consequences. This allows us to save resources such as money, time, and labor.

- Calculation of fixed periodic payments

PLT function. This function is designed to calculate payments for one period based on fixed periodic payment and fixed percentage rates. Payments calculated using the PPLAT function include the principal payment and interest payments.

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The function is generally written as follows:

PLT (rate, kdavr, nz, bs, type).

Here Stavka is the interest rate on the loan;

Kdavr is the total number of loan payments;

Nz is the amount equal to the residual price at the current time or future payments called the principal amount at the current time;

Bs is the required value of the future price or the funds remaining after the last payment. If the bs argument is omitted, it is assumed to be zero.

Type is a number of 0 or 1, which indicates when the payment will be made. The PLT function can be used for the following calculations:

Suppose the future value of fixed periodic payments to be made at the beginning or end of each accounting period is known. It is necessary to calculate the size of these payments. The corresponding instruction in EXCEL is as follows:

PLT (norm, kdavr, , bs, type).

Let's say that it is required to calculate the volume of periodic payments equal in amount to guarantee the payment of the debt in full after kperiods. The size of these payments will be equal to the current state of the debt. This process is written in the EXCEL environment with the following formula:

PLT (norm, kdavr, nz, , type).

Debt payments are usually made at the end of each accounting period. The formula for this score is written as follows:

PLT (rate, kdavr, nz) because the type argument is 0

If the debt is not paid in full, then its future value will not be zero, but will be equal to the remaining amount of the debt after all payments.

Let's give an example. Let's assume that at the end of every month, it is required to collect 4,000,000 soums within three years. If the annual interest rate on the deposit is 12%, what should be the amount of the initial deposit.

**Solution:** First, we determine the total number of periods for adding percentages, taking into account the percentage rates for the period. These amounts are 312 and 12% / 12 (norm argument), respectively. The type argument is null. We determine the monthly payment amount:

PLT(12%/12;12*3;;40000000) = -928,572.39 soums

Matter. Let's say that the bank gave a loan (loan) of 200 million soums for 4 years with an annual interest rate of 18%. The loan was given at the beginning of the year. Payments are made in the same amounts at the end of the year. Determine the amount of loan payments in each year.

Solving. The amount of annual payments PLT(18%; 4;-200000000) = 74 347 734.19 soums million soums.

Note: For the bank, the loan amount is a negative amount (loss), and the amount of annual payments is a positive value (income).

**Conclusion:** It is dedicated to studying the guidelines for solving economic problems and analyzing the theoretical and practical aspects of economic functions using the Microsoft Excel program included in the Microsoft office software package.

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Our observations are that Microsoft Excel is usually used only for processing tabular data related to accounting. However, this program can be applied to solving a number of scientific problems, as well as to problems frequently used in banking practice.

A number of functions included in Microsoft Excel can help ordinary customers of banks to make decisions on issues such as obtaining a loan and depositing savings, which are widespread in today's society.

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